

Virginia AVIATION



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Centennial Celebration of Flight: The Wright Way

Wind, sand, and the dream of flight brought Wilbur and Orville Wright to Kitty Hawk, North Carolina, where they achieved the first successful airplane flights on December 17, 1903. With courage and perseverance these self taught engineers relied on teamwork and the application of scientific process.

What they achieved changed the world forever!

They had seemingly settled into respectability as proprietors of a small business. But the Wright brothers of Dayton, Ohio nurtured a barely respectable dream; the possibility of flight. Wilbur, four years older, quiet and intense, a dreamer who could lose himself in books. Orville was outgoing, talkative, and an immaculate dresser. Both combined intuitive mechanical ability with analytical intelligence.

In 1892 they opened a bicycle shop and prospered, but they were restless, especially Wilbur. Their energies were focused by two events of 1896; the death in a flying accident of Otto Lilienthal, the celebrated experimenter with gliders, and the successful launching of powered models by Samuel Langley. The Wright's serious work in aeronautics began in 1899 when Wilbur wrote the Smithsonian for literature. Dismayed that so many great minds had made so little progress, the brothers were also exhilarated by the realization that they had as much chance as anyone of succeeding. Wilbur took the lead in the early stages of their work, but Orville was soon drawn in as an equal

collaborator. They quickly developed their own theories, and for the next four years devoted themselves to the goal of human flight.

1899

The Wrights knew that the solutions to lift and propulsion needed only refining, but no one had achieved lateral control. Rejecting the principle of inherent stability — the conventional wisdom - they wanted control to depend on the pilot. Wilbur hit upon the idea of warping the wings - sparked by his observation of birds and the idle twisting of a box - to rotate the wings and stabilize flight. They tested wing-warping - the forerunner of ailerons - on a 5-foot biplane kite.

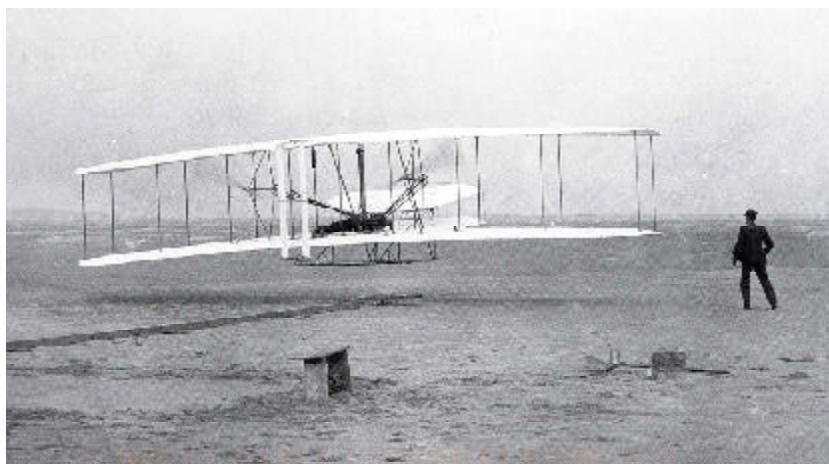
1900

Confident their design was sound, the Wrights built a 17-foot glider with an unusual forward elevator. They went to Kitty Hawk hoping to gain flying experience, but the wings generated less lift than expected, and they flew the

glider mostly as a kite, working the control surfaces from the ground. Wilbur's time aloft in free flight totaled only 10 seconds. They went home somewhat discouraged, but convinced they had achieved lateral and longitudinal control.

1901

This was the year the Wrights sharpened their focus. Trying to overcome the lift problem, they increased the camber of the 1901 glider. They also lengthened its wingspan to 22 feet, making it the largest glider anyone had attempted to fly. But, at their new Kill Devil Hills camp, lift was still only a third of that predicted by the Lilienthal data upon which the wing design was based. And the glider pitched wildly, climbing into stalls. When they returned to the earlier camber, they achieved longitudinal control and eventually glided 335 feet. But the machine was still unpredictable. When the pilot raised the lift than expected, and they flew the



(Centennial cont. from Pg. 1)

left wing to initiate the expected right turn, the machine instead tended to slip to the left (adverse yaw). This failure, and the realization that their work had relied on false data, brought them to the point of quitting. Instead they built a wind tunnel and produced their own data.

1902

The 1902 machine embodies the Wrights' research. They gave it efficient 32-foot wings and added vertical tails to counteract adverse yaw. The pilot moved a hip cradle to warp the wings. Some 400 glides proved the design workable, but still flawed. Sometimes, when the pilot tried to raise the lowered wing to come out of a turn, the machine instead slid sideways toward the wing and spun into the ground. Orville suggested a movable tail to counteract this tendency. After Wilbur thought to link the tail movement to the warping mechanism, the plane could be turned and stabilized smoothly. If others had thought about steering at all, it was by rudder - a marine analogy unworkable in the air. The Wrights saw that control and stability were related, that a plane turned by rolling. Six hundred more glides that year satisfied them that they had the first working airplane.

1903

Now the Wrights had to power their aircraft. Gasoline engine technology had recently advanced to where its use in airplanes was feasible. Unable to find a suitable lightweight commercial engine, the brothers designed their own. It was cruder and less powerful than Samuel Langley's, but the Wrights understood that relatively little power was needed with efficient lifting surfaces and propellers. Such propellers were not available, however, scant relevant data could be derived from marine propeller theory. Using their air tunnel data they designed the first effective airplane propeller, one of their most original and purely scientific achievements.

Returning to the Kill Devil Hills, they mounted the engine on the new 40-foot, 605-pound **Flyer** with double tails

and elevators. The engine drove two pusher propellers with chains, one crossed to make the props rotate in opposite directions to counteract a twisting tendency in flight. A balky engine and broken propeller shaft slowed them, until they were finally ready on December 14. Wilbur won the coin toss, but lost his chance to be the first to fly when he oversteered with the elevator after leaving the launching rail. The flyer, climbed too steeply, stalled, and dove into the sand. The first flight would have to wait on repairs.

December 17, 1903

Three days later, they were ready for the second attempt. The 27-mph wind was harder than they would have liked, since their predicted cruising speed was only 30-35 mph. The headwind would slow their ground-speed to a crawl, but they proceeded anyway. With a sheet they signaled the volunteers from the nearby lifesaving station that they were about to try again. Now it was Orville's turn.

Remembering Wilbur's experience, he positioned himself and tested the controls. The stick that moved the horizontal elevator controlled climb and descent. The cradle that he swung with his hips warped with wings and swung the vertical tails, which in combination turned the machine. A lever controlled the gas flow and airspeed recorder. The controls were simple and few, but Orville knew it would take all his finesse to handle the new and heavier aircraft.

At 10:35 he released the restraining wire. The flyer moved down the rail as Wilbur steadied the wings. Just as Orville left the ground, John Daniels from the lifesaving station snapped the shutter on a preset camera, capturing the historic image of the airborne aircraft with Wilbur running alongside. Again, the flyer was unruly, pitching up and down as Orville overcompensated with the controls. But he kept it aloft until it hit the sand about 120 feet from the rail. Into the 27-mph wind the groundspeed had been 6.8 mph, for a total airspeed of 34 mph. The brothers took turns fly-

Virginia Aviation Events



December 15, 2003 Opening of Steven F. Udvar-Hazy Center in Chantilly, Virginia (Dulles Airport). For more information call (202) 357-2700 or visit www.nasm.si.edu/museum/udvarhazy.

December 17, 2003 100th Anniversary of Powered Flight. For information on centennial events visit the Wright Brothers Memorial web site or the First Flight Centennial web site.

February 19, 2004 FAA Safety Seminar at New River Valley Airport will include Pilot Safety Seminar and Wings Program. For more information contact Bob Atkins at (540) 674-4141.

March 20, 2004 Virginia Ultralight Safety Seminar will be held from 8:30 a.m. until 3:30 p.m. at the Virginia Aviation Museum on Richmond International Airport. For more information contact Carolyn Toth at (804) 236-3637.

Submit upcoming event information to :
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ing three more times that day, getting a feel for the controls and increasing their distance with each flight. Wilbur's second flight - the fourth and last of the day - was an impressive 852 feet in 59 seconds.

This was the real thing, transcending the powered hops and glides others had achieved. The Wright machine had flown. But it would not fly again, after the last flight it was caught by a gust of wind, rolled over, and damaged beyond easy repair. With their flying season over, the Wrights sent their father a matter-of-fact telegram reporting the modest numbers behind their epochal achievement.

(source: National Park Service)

Introducing: Independence Air

ACA To Transition Washington Dulles Operation Into America's Largest Low-Fare Hub

Preview of Airline's New Website Now Available at www.flyi.com

Atlantic Coast Airlines, the Dulles, VA-based carrier (ACA) (NASDAQ/NM: ACAI) recently revealed the name and brand identity of its upcoming low-fare airline at a ceremony attended by over 2,000 airport and government officials, stockholders, media, company partners and employees at Washington Dulles International Airport. The airline will be known as Independence Air.

Atlantic Coast Airlines Chairman and Chief Executive Officer Kerry Skeen said, "We are very excited that Independence Air at Washington Dulles will create America's largest low-fare

hub, in terms of total departures-in the fifth largest air travel market in the U.S. We remain solidly convinced that by using the right aircraft sized for the right markets, Independence Air will take its place as the natural next step in the evolution of the highly successful low-fare airline model."

Mr. Skeen added, "Every detail of Independence Air is being designed to offer travelers in the Washington metropolitan area-as well as 50 other communities-exactly what they have been asking for: low, simple fares, excellent service, a faster, easier travel experience

and a convenient, flexible schedule of flights to business and leisure destinations all across the country."



Independence Air will operate a fleet of at least 112 jets, including 25 Airbus A320/A319 aircraft as well as 87 CRJs.

Richmond International adopts free parking policy in hourly lot

First 30-minutes to be free

Richmond International Airport (RIC) will adopt a **"30-Minute Free Parking"** policy in the airport's **Hourly Lot**, as resolved by the Capital Region Airport Commission at its regular monthly meeting today.

"The policy adjustment is intended to encourage greater use of the airport's Hourly parking facilities by those picking up and dropping off travelers," stated Commission chairman John E. Mazza, Jr. "Setting aside the anticipated drop in revenue, the Commission strongly feels that this is a prudent move to encourage our customers to use convenient, close-in parking as we approach the busy holiday travel season."

The **"30-Minute Free Parking"** policy will offer the following charge structure:

- 0 to 30 minutes Free Parking in Hourly Lot
- 31 to 60 minutes \$2.00;
- 61 to 120 minutes \$4.00;

\$2.00 per each additional hour, maximum of \$24.00 per day.

Parking rates will remain unchanged for all other lots at Richmond International Airport, and are as follows:

Economy Parking: \$1 per hour, maximum \$6.00 per day.

Shuttle Lots A&B: \$1 per hour, maximum \$7.00 per day.

Daily Parking: \$3.00 per hour, maximum \$10.00 per day.

Valet Parking: \$20 first day, \$15 each additional day.

The Hourly Lot policy changes are anticipated to go into effect by December 1, 2003. The net annual revenue decrease is estimated to approach \$200,000.

Hourly parking at RIC consists of 280 spaces located in the mid-terminal areas of the first floor of the North and South parking garages at Richmond International.

US Airways checked baggage notice

US Airways recently released a notice to customers concerning checked bags. Each customer is allowed to check (2) two bags free of charge. Each bag must be 50 pounds or less.

Baggage:

0 - 50 lbs	Free
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51 - 70 lbs	\$25.00
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71 - 100 lbs	\$80.00
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Each additional checked bag is subject to an excess baggage charge:

1 - 3 bags	\$80.00 per bag
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4 - 6 bags	\$105.00 per bag
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7 or more in excess	\$180.00 per bag
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Size and excessive weight restrictions also apply. Bags that exceed the size and weight limitations are also subject to additional charges. International baggage requirements may vary. Please contact US Airways for further details.

Space Shuttle Columbia Astronaut and Three Airport Development Advocates are Inducted into the Virginia Aviation Hall of Fame at the Virginia Aviation Museum

The Virginia Aeronautical Historical Society recently inducted four Virginians into the Virginia Aviation Hall of Fame.

They are the late NASA Mission Specialist and Navy Captain David M. Brown, retired Navy Rear Admiral Dewitt L. Freeman, Jeanne H. Pedigo and the late Frank R. Marshall.

NASA Astronaut David M. Brown - Arlington, Virginia

Inducted in 2003, David M. Brown received his Bachelor of Science in biology from the College of William and Mary in 1982 and earned his private pilot license at the Williamsburg Airport in the summer of 1982. He received his Doctorate in Medicine from Eastern Virginia Medical School and enlisted in the US Navy as Flight Surgeon in 1984. In 1988, he was selected to attend the US Navy flight-training program. After receiving his gold Naval aviator wings in 1990, he flew the A-6E, FA-18 and T-38 while continuing to serve as a flight surgeon. While assigned as a flight surgeon to the US Navy Test Pilot School, he was selected to join the NASA astronaut-training program.

In 1996, he reported to Johnson Space Center for training as a Mission Specialist. For two years he went through rigorous academic and hands-on training. He was then assigned to STS-107 aboard the Space Shuttle Columbia.

On January 16, 2002 Brown and his fellow astronauts blasted off and orbited the earth for the next 16-days conduct-

ing research and scientific experiments. Unfortunately, the STS-107 mission ended abruptly on February 1, 2003 when the Space Shuttle Columbia and her crew perished during re-entry 16 minutes before scheduled landing. Captain Brown was the International Association of Military Flight Surgeon Pilots' president in 1996 and the Navy's Operational Flight Surgeon of the Year in 1986. He logged over 2,700 flying hours, and 15 days, 22 hours and 20 minutes in space.

Rear Admiral Dewitt L. Freeman, USN Retired - Louisa, Virginia

Inducted in 2003, Dewitt "Witt" Freeman earned his gold Naval Aviator Wings in 1944 through the V-5 Aviation Cadet Program. He flew the FM-2 until the end of WWII and then transitioned into the F-6F and F-8F. His first jet assignment was in the P-80 at Edwards AFB where he became the first



Dawn Pickhardt, Whitt Freeman and Jerry Jackson at the VAHF induction.

Navy pilot to remotely control the Regulus missile. He commanded the F-4B Phantom equipped squadron VF-41, which was one of the first units to deploy in response to the Russians' stationing nuclear-armed medium range ballistic missiles in Cuba. Other commands included VF-IOI, USS Truckee (AO-147), USS Saratoga (CV-60) and Carrier Division Four (USS Saratoga, USS America, USS Independence and USS John F. Kennedy).

After retiring as a Rear Admiral in

1975 he became a fixed base operator at Orange County Airport where he was successful in getting the runway extended. This effectiveness led the Industrial Development Authority in Louisa County to enlist Freeman to help develop an airport for Louisa County. As the Chairman of the new Airport Committee he led the successful effort to build the Louisa County Airport, which was dedicated in May 1984 as Freeman Field. Freeman is a long time member of the EAA and VAHS.

He oversaw the moving of the Shannon collection to the Virginia Aviation Museum in 1986-87. As the Chairman of the VAHS Board he oversaw the creation of the highly successful chapter program.

Jeanne H. Pedigo - Roanoke, Virginia

Jeanne H. Pedigo went to work for the National Advisory Committee for Aeronautics (NASA forerunner) in 1950. Soon thereafter she earned an advanced degree in aeronautical engineering and was recruited by North American Aviation as a Thermodynamics Engineer on the F-86 Sabre jet and F-100 Super Sabre jet aircraft. In 1970, Governor Linwood Holton appointed her to the Virginia Airport Authority where she continued to serve for Governors Mills Godwin and John Dalton. In 1981, Governor Dalton appointed Pedigo as the first, and to date, only woman Chairman of the Virginia Aviation Board.

In 1986, she left the board to work for Campbell & Paris Engineers as the Director of Business Planning. In 1998, (see [VAHF](#) cont. on Pg. 5)



(VAHF cont. from Pg. 4)

she was recruited by Governor Gilmore to serve another four-years on the Virginia Aviation Board. Throughout her 20-year tenure she was a strong advocate for both air carrier and general aviation facilities. She continues to actively participate in many national aviation-oriented organizations such as the American Association of Airport Executives, Airports Council International and the Southeastern Airport Managers Association.

Frank R. Marshall - Manassas, Virginia
Inducted in 2003, Frank R. Marshall played an important role in the

founding and development of the Manassas Municipal Airport. In 1959, he began operating the old Manassas Airport. Under his leadership



the number of based airplanes soared from four to over 50 and the number of hangars grew from four to 10.

However, for a variety of reasons, the old airport could not be expanded any more and was destined to be closed. Marshall successfully led the fight to build a new Manassas Municipal Airport, which was dedicated in 1964. He was also instrumental in the development of the Warrenton-Fauquier Airport and in the operation of the Winchester Municipal Airport. Marshall was a significant promoter of aviation in the Commonwealth of Virginia.

He owned and operated a major

Piper Aircraft Dealership, Marshall Aviation, and was an active member in the Virginia Aviation Trades Association for many years. He was honored by the Flying Circus as an Air Pioneer of Manassas, and the City of Manassas and the Manassas Airport Commission named an airport road in his honor-Frank Marshall Lane.

The Virginia Aviation Hall of Fame is located at the Virginia Aviation Museum and administered by the Virginia Aeronautical Historical Society. For Aviation Museum information call (804) 236-3622. To access the Aviation

Museum website, log on to vam.smv.org.



VAHF members pose for a group photo during the recent induction ceremony at the Virginia Aviation Museum.

Photo by Jerry Jackson

Danville Regional chosen for SATS demonstration in 2005

Members of NASA and the National Consortium for Aviation Mobility (NCAM) recently announced Danville Regional Airport will be the site of the Small Aircraft Transportation System (SATS) project demonstration in 2005.

The plan is to develop four to eight passenger jets that would service suburban and rural communities at low rates, thereby relieving problems associated with highway gridlock and airport delays. The jets under development will be fuel efficient and carry a relatively low \$850,000 price tag.

The aircraft, which would be flown

by a single pilot, will take off and land from short runways at small airports. The end result is to eventually build aircraft that will be simple enough for the average person to own and operate.



VIRGINIA SATSLab

Proving Ground for Aviation System Technology

Virginia Tech, Old Dominion University, Ohio University and the Massachusetts Institute of Technology will join Averett University as research partners in the Virginia SATS Lab. There

also are SATS labs located in North Carolina, Maryland and Michigan with other states taking interest in the concept.

For more information on SATS please visit www.sats.nasa.gov.

Corporate Angel Network Pilot Volunteers Needed

Going their way? Give a cancer patient a lift

Do your corporate jets ever fly an empty leg? Do your planes ever take-off with a seat or seats to spare? How about volunteering those seats to cancer patients traveling to or from treatment centers, if you happen to be going their way? Five hundred top corporations have already answered "Yes!" to these questions. They became participants in Corporate Angel Network (CAN), and you can too.

CAN makes it easy. Using a proprietary and secure computer program, CAN volunteers match flights to patient requests, do all the paperwork and make all the arrangements. Call (914) 328-1313 for more information. For a current list of patient "rides needed," please visit: www.corpangelnetwork.org/corporate/seats.

NASA installs 'Centennial of Flight' exhibit at Charlottesville-Albemarle Airport

To commemorate the 100th anniversary of powered flight, NASA Langley Research Center has created an exhibit for the Charlottesville-Albemarle Airport that clearly defines the impact of the Wright Brother's first flight in 1903 on aviation.



From the Wright Flyer to the Space Shuttle, visitors to the Charlottesville-Albemarle Airport will explore the his-

tory and the science of flight. The exhibit will also include a continuously running documentary of the Wright Brother's historical quest, courtesy of the Discovery Channel entitled, "The Wright Stuff".

The 'Centennial of Flight' exhibit features five unique showcases, each depicting a significant era of time that shaped the aviation industry. Two other features of this exhibit include the "Future of Flight" display and the "Women of NASA" panel exhibit.

The "Future of Flight" panel exhibit is being seen for the first time at the Charlottesville-Albemarle Airport. It is a brand new addition to NASA's traveling exhibitions. The exhibit pays homage to the past, present

programs and accomplishments, and highlights research developments that will drastically change the future of aerospace.

Women's contributions to the aviation industry are highlighted in the "Women of NASA" panel exhibit. Although women have flown since 1908, nearly all of them were restricted to general aviation, i.e., private planes, or support jobs.

By 1958, women had already made their mark, not just in support roles, but as pioneering engineers, mathematicians, scientists, and technicians. The "Women of NASA" panel exhibit is a celebration of their contributions to the aviation industry.

The "Centennial of Flight" exhibition will be on display at the Charlottesville-Albemarle Airport from now until the end of January 2004.

18th Annual Aviation Career Day held at Richmond International Airport

The 18th Annual Aviation Career Day was held recently at Richmond Jet Center at Richmond International Airport, drawing high school students from across the region including the city of Richmond and the counties of Charles City, Chesterfield, Hanover, Henrico, and New Kent. The event has been organized annually over the last 18 years by the Sandston, Henrico East, and New Kent Rotary Clubs.

Attending students were exposed to aviation career opportunities ranging from commercial passenger and cargo airlines and military aviation, to law enforcement and college-level aviation programs. Students toured facilities at RIC, visited

static displays of aircraft such as an F-16 and a Blackhawk helicopter, and had the opportunity to hear speakers including Dr. William J. Bosher, Jr., Distinguished Professor at Virginia Commonwealth University's School of Education and Center for Public Policy.

Exhibitors included Averett Col-

lege, the Aviation Institute of Maintenance, Delta Airline Consultants, Dominion Aviation Services, Ethyl Aviation, Falwell Aviation Services, the FAA's Richmond Flight Standards District Office (FSDO), the Florida Institute of Technology, Helo Air, Henrico County Police Department, Martinair,

Million Air Richmond, the National Weather Service, Petersburg Radio Control A/C, Richmond International Airport (Human Resources Dept.), Sundance Aviation, the Virginia Air National Guard, the Virginia Army National Guard, and the Virginia Department of Aviation.



Virginia Aviation Board Allocates Funds To State Airports

At its bimonthly meeting held in Richmond recently, the Virginia Aviation Board (VAB) approved tentative allocations for 13 of the Commonwealth's airports from the Commonwealth Airport Fund, totaling \$599,946.

Receiving one of the largest allocations was Hampton Roads Executive Airport, in the amount of \$171,500 for fuel farm replacement – Jet A/AVGAS (Design), Hangar Site Preparation (Construction) and Airport Entrance Sign (Design/Construction). Other airports receiving allocations from the VAB were:

- **Lee County Airport** in the amount of \$6,400 for Terminal Building Study;
- **Blue Ridge Airport** was awarded \$28,000 for Clear Span Hangar Site Preparation (design);
- **Twin County Airport** received \$22,213 for Fueling System (Jet A) & Credit Card Reader;
- **Shenandoah Valley Airport** in the amount of \$48,000 for Fuel Tank (Jet A/AVGAS) Inspection and Testing and for Parking Lot Improvements (design);
- **Leesburg Executive Airport** was awarded \$80,250 for Terminal

Building Furniture (Public-Use), Land Acquisition – Increase # 2, Apron Expansion - South (design) and T-Hangar Site Preparation – Demolition – Phase 1 (design);

- **Luray Caverns Airport** received \$16,960 for Apron Expansion (construction) – Increase;
- **Stafford Regional Airport** in the amount of \$163,200 for Terminal Building Utilities (design) and Terminal Building (design);
- **Winchester Regional Airport** was awarded \$4,000 for Land Acquisition – Parcel 49;
- **Tappahannock-Essex Airport** received \$20,000 for Fueling System (design);
- **Falwell Airport** was awarded \$10,510 for Taxiway Rehabilitation

(Construction) – Increase;

- **Mecklenburg/Brunswick Regional Airport** in the amount of \$7,617 for Parallel Taxiway (construction) – Increase;
- **Accomack County Airport** received \$21,296 for Partial Parallel Taxiway South (construction) – Increase.

The Virginia Aviation Board has eight members representing seven regions. The Board approves funding requests brought to it by the Virginia Department of Aviation, a state agency working to support and promote commercial and private aviation interests for the Commonwealth's 67 public-use airports.

Roanoke airport adds morning nonstop flight to New York

The flight leaves at 6:40 a.m. to suit those who want to get a jump on the business day.

Roanoke Regional Airport announced recently that Allegheny Airlines, a Pennsylvania-based affiliate of US Airways Express, has added a second nonstop flight from Roanoke to New York's LaGuardia Airport.

The new flight will depart Roanoke at 6:40 a.m. The other nonstop to New York leaves at 4 p.m. Adding a morning component is a plus for business travelers. Roanoke travelers have had inconsistent options for New York nonstop flights over the years. Several carriers have added and deleted flights to the city during the past decade.

Overall passenger traffic at Roanoke Regional Airport through September is down about five percent compared to the same period last year. Including departing and arriving passengers, 421,515 passengers used the

Roanoke airport the first nine months of 2003.

Allegheny Airlines' new morning nonstop to New York uses a 37-passenger turboprop aircraft. It leaves Roanoke at 6:40 a.m. and arrives at LaGuardia at 8:39 a.m. A round trip, weekday ticket, with the return flight arriving in Roanoke at 8:34 p.m. the same day, is listed at \$994.50 online.

"Leisure" fares, which typically are booked further in advance and include a weekend stay, are much cheaper. US Airways' site, for example, listed one special seasonal fare for \$128 round trip.

New York-bound passengers have a number of additional daily flights out of Roanoke if they don't mind stopping in another city along the way.

- VIRGINIA AVIATION -

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Additional flights added at RIC

Travelers can now choose from additional non-stop flight options with new service underway or soon to start at Richmond International Airport to three top destinations, Chicago, Houston, and Minneapolis/St. Paul.

United/United Express now operates six daily departures to its hub at Chicago O'Hare (ORD). Its latest addition – starting in November – has the following schedule:

Richmond to Chicago (United/United Express)			
Flight	Departure	Arrival	Equipment
UA7847	6:00am	7:15am	CRJ

Chicago to Richmond (United/United Express)

Flight	Departure	Arrival	Equipment
UA7332	9:00pm	11:54pm	CRJ

Continental/Continental Express now flies three daily departures to its hub at Houston's Bush Intercontinental Airport (IAH). The newest flight offers this schedule:

Richmond to Houston (Continental/Continental Express)			
Flight	Departure	Arrival	Equipment
CO3261	6:25am	8:40am	ERJ

Houston to Richmond (Continental/Continental Express)

Flight	Departure	Arrival	Equipment
CO3260	3:45pm	7:30pm	ERJ

Northwest/Northwest Airlink currently flies two daily departures to its hub at Minneapolis/St. Paul (MSP), and is adding a third flight effective January 6, 2004. The third daily flight will offer a schedule as follows:

Richmond to Minneapolis/St. Paul (Northwest/Northwest Airlink, effective 1/6/04)

Flight	Departure	Arrival	Equipment
NW5692	2:10pm	4:10pm	CRJ

Minneapolis/St. Paul to Richmond (Northwest/Northwest Airlink, effective 1/6/04)

Flight	Departure	Arrival	Equipment
NW5628	10:10am	1:42pm	CRJ



If you are interested in learning more about what is going on in the Department of Aviation, please call our office at (804) 236-3624 or our Sponsor Hotline at (800) 292-1034. Visit our website for updates on future events at: www.doav.virginia.gov.



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